

Basis Statement

Chapter 2, Aquaculture Lease Regulations
Chapter 2.10(3)(3) Application Requirements, Environmental Characterization & Baseline
and
Chapter 2.27(2) Department Site Review, Documented Information
(Major Substantive Rulemaking pursuant to 12 MRSA §6072(5-A))

These regulations have been developed as a result of a Department-initiated review of the aquaculture leasing program completed in January 2002, comments received during a separate rulemaking proceeding in May 2002 initiated as a result of a citizen's petition for rulemaking submitted by the Conservation Law Foundation and the East Penobscot Bay Environmental Alliance, and the finfish aquaculture monitoring program protocols (FAMP) that have been utilized by the Department plus other state and federal regulating agencies for the standard application baseline and the Department's monitoring program since 1992.

These changes seek to improve the quality of information that is contained in all standard lease applications, increase the public notice and input on proposed aquaculture leases, and change how the Department reviews a completed application.

Summary of Comments

Chapter 2, Aquaculture Lease Regulations
Chapter 2.10(3)(3) Application Requirements, Environmental Characterization & Baseline
and
Chapter 2.27(2) Department Site Review, Documented Information
(Major Substantive Rulemaking pursuant to 12 MRSA §6072(5-A))

Hearing attendees

Three hearings were held on January 7, 8, and 9th, 2003 in Ellsworth, Portland, and Eastport that were attended by 53 individuals.

Laurice Churchill, DMR was the hearing officer for all three hearings. Andrew Fisk, DMR attended and presented a summary of the rules at each hearing.

January 7, 2003, Ellsworth

Ciona Ulbrich	Marsden & Donna Brewer
John Dittmar	Maggie Williams
Sally Mills	Susan Braley
Michael Briggs	Sebastian Belle
Terry Towne	Mark Peterson
Jesse Leach	Laurie Schreiber
Eric Moran	Leo & Gloria Siegal
Jane McCloskey	Shirley Carville
Sally & Jim Littlefield	Ron Huber
Steve Perrin	Chris Hamilton
George Smith	Steve Page
Roger Fleming	Edith Howland
Dennis Damon	Mike Tansey
Bill Shaw	Sarah McCloskey
Mary Costigan, DMR	

January 8, 2003 - Portland

Bob Gerber	John Phillips
Jim Wallace	Sean Mahoney
Chris Heinig	Susan Polans
Steve Kampiak	Frank Connelly
Mary Costigan, DMR	

January 9, 2003 – Eastport

Chris Spruce	Marie Holmes
Georgiana Kendall	William Kendall
Paul Thompson	David Morang
Steve Page	Susan Plachy
Tom Smith	Marilyn Dowling
David Turner	Jane McCloskey
Stephen Ellis	Jeff Kaelin
Bob Peacock	Sebastian Belle

Twenty-two (22) individuals, businesses, organizations, municipalities, or agencies submitted written comments by the close of the comment period on January 21, 2003.

Written comments were received from:

Sebastian Belle, Maine Aquaculture Association
James & Susan Braley
Charles Claggett
Roger Fleming, Conservation Law Foundation
Robert Gerber, East Penobscot Bay Environmental Alliance
Chris Hamilton, Maine Coast Heritage Trust
Peter Horton
Stephen Johnson, Stonington Harbor Master
Mark Kesselring, Stolt Sea Farm
William Lamb
George & Bobbi Lehigh
Jane McCloskey
Sean Mahoney, Verrill & Dana for Friends of Blue Hill Bay & Roque Island Gardner Homestead Corporation
Vivian Newman, Sierra Club
Steve Perrin, Friends of Taunton Bay
Mark Peterson, Great Eastern Mussel Farms
Regina Rivard
Gloria & Leo Siegel
Gertrude Simmons
Peter Suber
Tonya Troiani

State agencies submitting written testimony:

Department of Environmental Protection

The comments have been summarized and are listed below. Those comments presented in quotation marks indicate a direct quote. The rest of the comments are not necessarily verbatim transcriptions, but are summaries of testimony that present the range of comment on particular sections.

General comments

“Until there are some reasonable limits on the number and location of aquaculture leases the current climate of public divisiveness will continue.”

“The majority of these rules will improve the current process and should be adopted. I believe a comprehensive bay-wide planning and management program should be a necessary and vital component to keep ahead of problems that might arise otherwise.”

“These rules could significantly improve current process and should be adopted.”

“In summary, we do not necessarily object to the proposed changes. Most of our concerns focus on potential problems, depending on how the Department, or the courts, interpret them.”

“On the whole, the proposed amendments . . . add some clarity to, and will provide greater consistency in the application of, regulations that in the past caused public confusion and frustration with their application. . . . In certain instances, however, the proposed changes only make a bad situation worse or, in the interest of setting specific numerical standards, set the bar too low.”

Specific comments

Section 2.10 (3)(3) – Application Requirements, Environmental Characterization & Baseline

Support

We support the continued distinction between application requirements for discharge and non-discharge lease applications. They should not be made identical as they have different potential impacts.

Oppose

The wording in this section appears to require the submission of redundant information. The request to submit information on physical and ecological impact essentially appears twice. This needs to be clarified.

Department response: The Department agrees and has removed the proposed new language from the end of this section (2.10(3)(3)(B) - 1st paragraph).

While the agency indicates that shellfish leases do not have a discharge from the perspective of the Clean Water Act, the DMR needs to recognize that these applications can discharge noise, fumes, air pollution and be generally in conflict with other uses of the water. The DMR needs to consider this in its review, and the environmental characterization must include information to assess these other types of “discharges” including noise, and visual disturbance.

The term discharge is very misleading, it should be defined. Without further studies, to assume that shellfish have no waste products and cannot create a biomass is unproven and so these leases may require a discharge permit as well as finfish.

Department response: It is not necessary to characterize a shellfish lease as having a discharge in order to address the more general impacts discussed here. The Department is in the process of developing rules on noise, lights, and other performance standards to address these issues for all leases. Presently the Department can address specific problems by imposing conditions on leases.

The DMR’s current definition of discharge conforms to the Department of Environmental Protection (DEP) definition of discharge.

Non-discharge applications should have the same baseline requirements as finfish.

Department response: It is reasonable and appropriate to tailor application requirements (and the review thereof) to the scope and intensity of any particular type of activity. Whereas discharge and non-discharge are different operations, the department does not propose to make the two types of applications equivalent. The Department has added clarifying language to indicate that the baseline requirement for discharge applications is in addition to the site characterization, which is required for all applications.

We were disappointed that consideration of shoreside impacts (including noise, lights, and visual impacts) and site review planning were not included in this review of the rules.

Department response: The Department is presently involved in a separate rulemaking to develop rules that would govern the noise, lights, and other external, top-side impacts of aquaculture operations.

You should not be deleting the requirement to measure current at top and bottom depths for non-discharge applications. You need accurate information on waterbodies to know how

aquaculture feed and waste will be flushed out, or conversely, how severely they will concentrate and destroy habitat.

Department response: The Department's ability to obtain useful and accurate information on a proposed operation will not be compromised. This proposed change needs to be viewed in the broader context of a requirement being proposed in a separate rulemaking to require that all standard leases, which are subject to either the baseline or characterization requirement, attend a preapplication meeting. At this meeting the sampling details would be worked out and specified to the applicant. A specific requirement of top and bottom current speed has been found to not be necessary in all instances, particularly in shallow sites.

The review of an environmental characterization should not be done as early as April 1, if for no other reason than eel grass beds are not grown out by then. This makes the site review potentially flawed.

The environmental baseline is better defined in the summer months, the April 1 to November 15 deadline seems too broad.

Department response: The site review time period is specified in statute (12 MRSA §6072). Where there are seasonal variations in review items, the Department either schedules site work to accommodate those constraints or will require the applicant to present such information in their application directly. The Department can use existing sources of information as to the occurrence or distribution of natural resources in its review of applications.

Stipulate in 2.10(3)(3)(B)(2) that DO concentration, temperature, and salinity be measured continuously with a vertical resolution of 1 meter, rather than at the three specified depths presently proposed.

Department response: The Department understands that the basis of the proposed request is to ensure that there is adequate information on water quality. The present proposal requires obtaining water quality continuously over two, or more, 16-hour periods at three specific depths. This is adequate because the readings are continuous and taken at representative areas of the water column. This will allow for a reasonable determination of prior conditions at the site. However, the Department will continuously review this requirement to ensure that it remains in conformance with the Finfish Aquaculture Monitoring Program (FAMP) and the Maine Pollution Discharge Elimination System (MEPDES) monitoring requirements.

The application should include information as to the presence of wild salmon.

Department response: This information is evaluated during the review of an application, either by DMR, other state agencies, or the federal government in their review of pending lease applications.

Neither for nor against

Please make sure you accurately distinguish between "baseline survey" and "baseline" in 2.10(3)(3)(B).

How do you predict what the ecological impacts (2.10(3)(3)(B)) of an application will be? Maybe you should add "general" as a modifier to portray the intention more precisely and accurately.

The requirement to identify submerged aquatic vegetation by species is problematic in section 2.10(3)(3)(B)(1), particularly if you are not just specifying macrophytes and vascular plants, because this could also include sea mosses and filamentous algae. I would recommend dropping "by species." This will not compromise the utility of the information gathered.

Department response: The existing language is sufficiently clear to distinguish between the baseline itself and the survey conducted to create a baseline. The requirement to characterize ecological impact is presently in the existing regulations. The department does not consider it necessary to modify or stipulate it further given our experience to date. The Department concurs that identification “by species” is problematic. The language has been changed on identifying submerged aquatic vegetation, so that it is not necessary to identify to the species level, but rather the type and common name.

Clarify in 2.10 (3)(B) that a copy of the video or still photographs will accompany the written summary of the visual survey.

Department response: The Department acknowledges this clarification and has added clarification on this point in this section.

Section 2.27 – Department Site Review, Documented Information

Support

We support the proposed changes to Chapter 2.27

Oppose

DMR should eliminate the language granting it the right to waive collection of current speed and direction.

Department response: The Department specifies what data is to be collected and how at the required preapplication meeting that is tailored to the specific area and proposed application. Therefore the Department does not consider it necessary to retain this requirement or practice. It is unusual for administrative agencies to duplicate information collection that is submitted by an applicant, and consider this change is an effective and efficient proposal. The change allows the Department to use its discretion to determine on a case-by-case basis when the collection of current speed and direction would be useful for a review of the lease application.

We are not sure how the Department will interpret “appropriate geographic area.” There can be a very big size difference between an embayment and an entire bay. Will you favor a larger area over a smaller area?

I would favor retaining the specific one-mile distance in the consideration of an “area.” The move is toward siting farms at more exposed locations, in which case it would be more difficult to define a “bay.”

“Area” should include private common areas – such as a conservation easement or landowner’s association or any land that abuts a bay or body of water.

Department response: The language provides the Department with appropriate discretion to determine “area” for the purpose of the review. We do not support including private land in this category, as it is a review standard to determine the relationship of the proposed lease to all other existing aquaculture operations. It is not proposed to be a catch-all for evaluating all other uses.

I am concerned about the harbormaster commenting on ecologically significant flora and fauna, for which they may not have the qualifications.

Department response: The Department is confident that individual harbormasters will consider their expertise and knowledge on any particular subject when presenting information on this category. A harbormaster also has the option to not comment on items that he or she may not consider as being within his/her area of expertise. However,

local knowledge can provide useful information to the Department in its review of a proposed lease.

The DMR should add a requirement to collect data on the “other uses” of the water in the lease area – this should include tourism, marine trades, conservation efforts, scenic and wild character of the area as well. There is a clear statutory basis to this requirement, but the Department does not take this language seriously.

Department response: The Department currently considers “other uses” in the decision criteria in a manner that is consistent with the statute and prevailing case law. The Department is not narrowly or improperly focused in its review.

DEPARTMENT OF MARINE RESOURCES

Chapter 2 – Aquaculture Lease Regulations

2.10 Application Requirements

3. Required Elements. In addition to requirements specified in 12 M.R.S.A. §6072(4), the following at a minimum is required for an application to be considered complete:

3. Environmental Characterization and Baseline.

- A. ~~No discharge applications. Environmental characterization. An environmental characterization of the site upon which the decision to seek a lease was based. The Applications for leases with no discharge require the submission of an environmental characterization that shall include, but not be limited to, bottom characteristics, resident flora and fauna, tide levels, and current speed and direction (near top and bottom).~~

For non-discharge applications, the Department may waive the requirement for current speed and direction if the information is not necessary for applying the decision criteria or other requirements associated with the proposed lease. Examples of sites where this requirement may be waived include, but are not limited to, very shallow sites or areas of little or very limited current flow.

This environmental characterization shall be used to provide a description of the physical and ecological impact of the project on existing and potential uses of the site as a result of the operation. Applicants may do more than one site characterization, but one characterization must be completed between April 1 and November 15, dates inclusive.

- B. ~~Discharge applications Environmental baseline.~~ Applicants that have submitted applications that involve a discharge into State waters must also conduct a Department approved environmental baseline according to Chapter 2.10(3)(3)(B)(1) and (2) below. The baseline will serve as a benchmark for monitoring the effects of farms on sediments, marine organisms, and water quality. The baseline requirements ~~for the different categories of leases~~ are as follows:

This baseline shall be used to provide a description of the physical and ecological impact of the project on existing and potential uses of the site as a result of the operation. Applicants may do more than one baseline, but one baseline must be completed between April 1 and November 15, dates inclusive.

The baseline must include a clear and decipherable video showing bottom characteristics as well as the written description.

- ~~(1) Structure, Discharge. The baseline must include diver surveys, water quality testing and benthic analysis. The applicant shall use methods prescribed by the Department.~~

- ~~(2) No Structure, Discharge. The baseline must include a clear and decipherable video showing bottom characteristics and water quality testing, unless otherwise specified by the Department. All activities must use methods prescribed by the Department.~~

- ~~(3) Structure, No Discharge. No baseline required.~~

- ~~(4) No Structure, No discharge. No baseline required.~~

- (1) Sediment & benthic characterization

- (a) A visual survey shall be conducted to document all representative bottom types within the proposed lease area. Representative bottom types include boulder-cobble, gravel, sand, mud, and submerged aquatic vegetation. The survey shall indicate generally whether the lease area is depositional or erosional. The survey shall be documented by video or still photography. If a site is too deep or

deemed unsafe to be surveyed by SCUBA diver, then remote video or still photography documentation shall suffice. The results of the visual survey shall be summarized in writing and a copy of the documentation submitted with the application.

The applicant shall confirm the number and the extent of survey transects with the Department prior to conducting the visual survey, and the Department may reduce or increase the number of transects depending on site characteristics or other existing information. Under no circumstances shall the visual survey be waived.

In addition to the minimum diver survey or video or photographic documentation, the Department may require that the bottom substrate be characterized remotely through the use of seismic reflection surveys (side-scan) or a fish finder. A sufficient number of transects to characterize the entire area within the proposed lease must be taken.

(b) Sediment cores must be taken to adequately sample representative bottom types. Each core's location shall be accurately described. Sediment analysis shall report core depth, depth of any unconsolidated organic material, total organic carbon (cg / g or centigrams per gram) in percent, and grain size distribution (%) from coarse gravel to clay size fractions. Sediment cores may be taken as a subsample of the benthic cores described below in subsection (c).

(c) Benthic samples shall be sieved through a 1.0 mm sieve and the infauna organisms enumerated and identified to the species or the lowest practical taxonomic level, whichever is higher. A general characterization of the community structure must be provided with the infauna data and sampling methods shall be described.

(2) Water quality characterization

Water column quality shall be characterized on two separate occasions, one of which shall be conducted between August 15 and September 15. Characterization of water temperature, dissolved oxygen concentrations, and salinity shall encompass two tidal cycles in order to provide a representative description of conditions at the site. At least one profile shall be taken no later than 2 hours after sunrise. Current velocity and direction shall be conducted over at least a 16-hour period. Readings shall be at intervals of no less than 3 readings per hour.

On sites where water depth is 30 feet or less at mean low water, samples shall be taken at near surface and near bottom. On sites where water depth is greater than 30 feet at mean low water, samples shall be taken at near surface, the depth corresponding to the bottom of the nets, and near bottom.

Data shall be included in both summarized, or graphical format, and unsummarized format in the application.

2.27 Department Site Review

2. Documented Information

Site specific documented information which is available will be assembled and included in the Department report, including verification of the location of the proposed lease boundaries, distances to shore, navigational channels and moorings, tide, current, and temperature data, patterns of ice formation and flows, location of shellfish beds, observed fishing activity in and around the proposed site, and the location of any municipally, state, or federally owned beaches, parks, or docking facilities within 1,000' of the proposed lease. The description and location of existing or proposed aquaculture lease sites within the area ~~a one-mile radius of the proposed site~~ will be included. For the purpose of this report the area shall be considered to be a river, bay, estuary, embayment, or some other appropriate geographical area in order to adequately

consider the potential impact of the amount and density of existing aquaculture activities and the proposed application.

The Department shall determine whether or not to verify the applicant's water quality information (tide, current, salinity, dissolved oxygen) through its own measurements. If the applicant's information is deemed to be adequate for review, then the water quality section of the report may be waived.

The Department shall conduct an adequate number of dives or remote video transects to substantiate benthic conditions and substrate characteristics as submitted by the applicant. The Department reserves the right to request additional information of the applicant in the event that the information in an application is found to be insufficient or inadequate for review.

If ~~a~~ ~~in the event the~~ proposed lease site is located in a jurisdiction ~~which that~~ employs a harbormaster, the Department shall request information from the municipal harbormaster about designated or traditional storm anchorages, navigation, riparian ingress and egress, fishing or other uses of the area, ecologically significant flora and fauna, beaches, parks, and docking facilities in proximity to the proposed lease.